

### **ATTACHMENTS**

Attached is a glossary of Sleep Terms, Definitions and Abbreviations for the purpose of showing that brainwave frequencies have considerable overlap with those recited within pending independent claim 1 and that none of the brainwave frequencies are in the range of 40 to 80 Hz.

### **REMARKS**

By way of this amendment claim 1 has been amended and claims 2, 3 and 8-10 have been canceled. Support for the amendments to claim 1 is found in the claims as originally presented as well as the specification text found at page 3, lines 1-5 and 7-8. As such, it is submitted that no new matter has been added by way of this amendment.

Currently, claims 1, 4 and 6 stand rejected under 35 U.S.C. §103(a) over Treyz (US 6,678,215) in view of Schulz (US 3,576,185). The subject matter of claim 2 stands rejected under 35 U.S.C. §103(a) over Treyz and Schulz in view of the information disclosed in the specification. Lastly, claim 5 stands rejected under 35 U.S.C. §103(a) over Treyz in view of Schulz and further in view of Adatia (US 2003/0112262).

#### **Remarks Directed to Rejection of Claims 1, 4 and 6 over Treyz in View of Schulz and Further in View of Information Disclosed in the Specification of the Current Application**

Claim 1 has been amended to recite generation of “repetitive sleep inducing sound having a frequency between 3 and 30 Hz at a user location; and a Web link to information selected from the group consisting of: sleep-related research, sleep products, and a sleep discussion chat room.”

Treyz is cited for teaching a network-based program to produce sounds for a user yet is deficient in lacking a teaching as to the inclusion of sleep-inducing sounds as media available to the user. (See Paper No. 2, page 3, second paragraph). Schulz is cited to bolster the teaching of Treyz for teaching tones from 40 to 80 Hz. The specification admission that oscillatory sounds

in the frequency range of 3 to 30 Hz and preferably between 5 and 15 Hz are well known to induce relaxation and somnolence (page 3, lines 8-10) is cited for the proposition that “it would have been obvious to alter the combination of Treyz and Schulz to produce the lower frequency tones in the range of 3-30 Hz with a goal of maximizing relaxation of the user.” (Paper No. 2, sentence bridging pages 4-5).

Reconsideration of the rejection is requested based on the following remarks. Treyz has as its objective providing improved radios and clock radios as well as places for receiving audio signals other than traditional radio broadcasts (column 1, lines 17-22). Applicant submits the only teaching of Treyz relevant to sleep is in fact a contrary teaching in that it is in regard to an alarm clock set to provide the desired wake-up time (column 2, line 61). Treyz further teaches that a variety of audio content can be played “upon wake-up in an alarm clock” (column 5, lines 66-67). As such, it is submitted that Treyz teaches the use of an audio device to terminate a sleep session and not to induce such a session.

Schulz teaches the use of sound waves having a frequency between 40 and 80 Hz (column 1, line 74) to induce sleep through changing the rhythm of breathing of a patient “into a calming and sleep-inducing tempo by acoustical and optical means.” (Column 1, lines 49-51).

The specification text relating to frequencies between 3 and 30 Hz being conducive to relaxation and sleep overlap with the frequencies of various brainwaves associated with sleep (see the attached glossary of Sleep Terms, Definitions and Abbreviations for various electroencephalogram frequencies).

It is respectfully submitted that the prior art lacks a motivation to make the reference combination. Treyz teaches an alarm clock as activated to begin at a certain time and provide an auditory output until disengaged as intended to wake a user. Waking a user is contrary to the

purpose of the claimed invention, Schulz and the specification statement relied upon. Alternatively, operating Treyz as a radio lacks the "Web link to information selected from the group consisting of: sleep-related research, sleep products, and a sleep discussion chat room." Furthermore, the teaching of Schulz is quite clear that the frequency need be between 40 and 80 Hz. To modify the frequency so that it is between 3 and 30 Hz according to the claimed invention is submitted to be contrary to the sleep induction mode of effect of Schulz in adjusting the rhythm of breathing of a patient. To change the frequency to which a user is subjected to below 40 Hz has no basis in the prior art as inducing a calming effect on respiration. As such, it is submitted that the prior art lacks a teaching or suggestion supporting the combination. See *ACS Hospital Systems, Inc. v. Montefiori Hospital*, 732 F.2d at 1577, 221 USPQ 929, at 933.

In light of the above amendments and remarks, reconsideration and withdrawal of the rejection as to claims 1, 4 and 6 under 35 U.S.C. §103(a) over Treyz in view of Schulz and further in view of specification admission is requested.

**Remarks Directed to Rejection of Claim 5 over  
Treyz in View of Schulz and Further in View of Adatia**

Claim 5 is submitted to be in allowable form as a result of dependency from base claim 1, now believed to be in allowable form. Applicant hereby incorporates by reference the above remarks made with respect to Treyz and Schulz in regard to the rejection of claim 5. Adatia does not provide a motivation that would bolster the above recited rejection deficiencies.

Additionally, Schulz also contemplates the use of acoustical and optical means combined to induce sleep with the optical and acoustic output being modulated in concert (column 1, lines 35-47). As such, Schulz teaches that a visual signal must necessarily also be within a frequency range of 40 and 80 Hz.

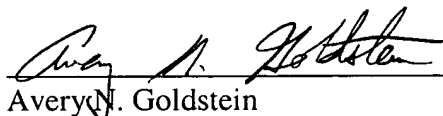
Claim 5 recites the limitation of a "visual stream changing in concert with said sound [having a frequency between 3 and 30 Hz]." As the prior art reference combination fails to teach a visual effect modulated in the 3 and 30 Hz frequency range in concert with the repetitive sleep-inducing sounds, it is respectfully submitted that a *prima facie* case of obviousness has not been established with regard to claim 5.

In light of the above remarks, reconsideration and withdrawal of the rejection as to claim 5 under 35 U.S.C. §103(a) over Treyz in view of Schulz and further in view of Adatia is requested.

**Summary**

Claims 1 and 4-6 remain pending in the application. Entry of this amendment is requested. Reconsideration and allowance of the claims is also solicited. Should the Examiner have any suggestions as to how to improve the form of the pending claims, it is respectfully requested that the undersigned attorney in charge of this application be contacted at the telephone number given below to resolve any remaining issues.

Respectfully submitted,



Avery N. Goldstein  
Registration No. 39,204  
Gifford, Krass, Groh, Sprinkle,  
Anderson & Citkowski, P.C.  
2701 Troy Center Drive, Suite 330  
P.O. Box 7021  
Troy, MI 48007-7021  
(248) 647-6000

Attorney for Applicant

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Erica L. Triner  
Erica L. Triner